



(a)(2ii) First Retest Fail

From 1/1/2014 to 12/31/2014

All Vehicles	A			T			O			B			C						
Model Year	ASM			TSI			OBD			OBD+ ASM			OBD+ TSI			Total			
	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	
1968	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	0	0.0%	
1969	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1970	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1971	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1972	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1973	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1974	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1975	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1976	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1977	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1978	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1979	0	0	0.0%	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	0	0.0%	
1980	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1981	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1982	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	0	0.0%	
1983	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
1984	1	1	100.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	1	100.0%	
1985	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	0	0.0%	
1986	6	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	6	0	0.0%	
1987	6	1	16.7%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	6	1	16.7%	
1988	23	1	4.3%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	23	1	4.3%	
1989	44	9	20.5%	6	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	50	9	18.0%	
1990	321	95	29.6%	21	5	23.8%	0	0	0.0%	0	0	0.0%	0	0	0.0%	342	100	29.2%	
1991	468	161	34.4%	37	13	35.1%	0	0	0.0%	0	0	0.0%	0	0	0.0%	505	174	34.5%	
1992	480	174	36.3%	38	16	42.1%	0	0	0.0%	0	0	0.0%	0	0	0.0%	518	190	36.7%	
1993	679	219	32.3%	56	27	48.2%	0	0	0.0%	0	0	0.0%	0	0	0.0%	735	246	33.5%	
1994	957	318	33.2%	74	20	27.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1031	338	32.8%	
1995	997	334	33.5%	90	30	33.3%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1087	364	33.5%	
1996	0	0	0.0%	21	7	33.3%	759	53	7.0%	204	73	35.8%	17	3	17.6%	1001	136	13.6%	
1997	0	0	0.0%	35	11	31.4%	1090	71	6.5%	135	45	33.3%	4	2	50.0%	1264	129	10.2%	
1998	0	0	0.0%	38	17	44.7%	1377	108	7.8%	89	16	18.0%	14	1	7.1%	1518	142	9.4%	
1999	0	0	0.0%	44	12	27.3%	1708	123	7.2%	0	0	0.0%	0	0	0.0%	1752	135	7.7%	
2000	0	0	0.0%	62	27	43.5%	2460	177	7.2%	0	0	0.0%	0	0	0.0%	2522	204	8.1%	
2001	0	0	0.0%	34	12	35.3%	2362	184	7.8%	0	0	0.0%	0	0	0.0%	2396	196	8.2%	
2002	0	0	0.0%	46	9	19.6%	2615	157	6.0%	0	0	0.0%	0	0	0.0%	2661	166	6.2%	
2003	0	0	0.0%	43	14	32.6%	2285	141	6.2%	0	0	0.0%	0	0	0.0%	2328	155	6.7%	
2004	1	0	0.0%	39	13	33.3%	2369	107	4.5%	1	0	0.0%	0	0	0.0%	2410	120	5.0%	
2005	0	0	0.0%	4	1	25.0%	1895	102	5.4%	1	1	100.0%	0	0	0.0%	1900	104	5.5%	
2006	0	0	0.0%	3	0	0.0%	1893	99	5.2%	0	0	0.0%	0	0	0.0%	1896	99	5.2%	
2007	0	0	0.0%	0	0	0.0%	1263	70	5.5%	1	0	0.0%	0	0	0.0%	1264	70	5.5%	
2008	0	0	0.0%	0	0	0.0%	910	46	5.1%	0	0	0.0%	0	0	0.0%	910	46	5.1%	
2009	0	0	0.0%	0	0	0.0%	465	17	3.7%	0	0	0.0%	0	0	0.0%	465	17	3.7%	
2010	0	0	0.0%	0	0	0.0%	393	26	6.6%	0	0	0.0%	0	0	0.0%	393	26	6.6%	
2011	0	0	0.0%	0	0	0.0%	279	16	5.7%	0	0	0.0%	0	0	0.0%	279	16	5.7%	
2012	0	0	0.0%	0	0	0.0%	350	11	3.1%	0	0	0.0%	0	0	0.0%	350	11	3.1%	
2013	0	0	0.0%	0	0	0.0%	101	7	6.9%	0	0	0.0%	0	0	0.0%	101	7	6.9%	
2014	0	0	0.0%	0	0	0.0%	18	1	5.6%	0	0	0.0%	0	0	0.0%	18	1	5.6%	
2015	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	
Totals:	3986	1313	32.9%	692	234	33.8%	24592	1516	6.2%	431	135	31.3%	35	6	17.1%	29736	3204	10.8%	
(a)(2iii) First Retest Pass																			
Totals:	3986	1853	46.5%	692	321	46.4%	24592	19146	77.9%	431	204	47.3%	35	21	60.0%	29736	21545	72.5%	
Percent of First retest																			
FRFail		3166	41.5%		555	42.2%		20662	7.3%		339	39.8%		27	22.2%		24749	12.9%	



(a)(2ii) First Retest Fail

From 1/1/2014 to 12/31/2014

Passenger Model Year	A			T			O			B			C			Total		
	ASM			TSI			OBD			OBD+ ASM			OBD+ TSI					
	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail
1968	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	0	0.0%
1969	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1970	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1971	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1972	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1973	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1974	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1975	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1976	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1977	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1978	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1979	0	0	0.0%	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	0	0.0%
1980	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1981	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1982	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	0	0.0%
1983	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1984	1	1	100.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	1	100.0%
1985	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	0	0.0%
1986	4	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	4	0	0.0%
1987	5	1	20.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	5	1	20.0%
1988	10	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	10	0	0.0%
1989	21	3	14.3%	2	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	23	3	13.0%
1990	209	61	29.2%	7	1	14.3%	0	0	0.0%	0	0	0.0%	0	0	0.0%	216	62	28.7%
1991	278	101	36.3%	20	6	30.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	298	107	35.9%
1992	323	114	35.3%	17	8	47.1%	0	0	0.0%	0	0	0.0%	0	0	0.0%	340	122	35.9%
1993	373	124	33.2%	27	14	51.9%	0	0	0.0%	0	0	0.0%	0	0	0.0%	400	138	34.5%
1994	505	162	32.1%	43	9	20.9%	0	0	0.0%	0	0	0.0%	0	0	0.0%	548	171	31.2%
1995	530	166	31.3%	31	11	35.5%	0	0	0.0%	0	0	0.0%	0	0	0.0%	561	177	31.6%
1996	0	0	0.0%	0	0	0.0%	424	34	8.0%	148	51	34.5%	17	3	17.6%	589	88	14.9%
1997	0	0	0.0%	1	0	0.0%	613	31	5.1%	100	32	32.0%	4	2	50.0%	718	65	9.1%
1998	0	0	0.0%	0	0	0.0%	836	59	7.1%	87	15	17.2%	14	1	7.1%	937	75	8.0%
1999	0	0	0.0%	0	0	0.0%	1047	76	7.3%	0	0	0.0%	0	0	0.0%	1047	76	7.3%
2000	0	0	0.0%	0	0	0.0%	1503	103	6.9%	0	0	0.0%	0	0	0.0%	1503	103	6.9%
2001	0	0	0.0%	0	0	0.0%	1316	106	8.1%	0	0	0.0%	0	0	0.0%	1316	106	8.1%
2002	0	0	0.0%	0	0	0.0%	1421	79	5.6%	0	0	0.0%	0	0	0.0%	1421	79	5.6%
2003	0	0	0.0%	0	0	0.0%	1231	72	5.8%	0	0	0.0%	0	0	0.0%	1231	72	5.8%
2004	1	0	0.0%	0	0	0.0%	1128	47	4.2%	0	0	0.0%	0	0	0.0%	1129	47	4.2%
2005	0	0	0.0%	0	0	0.0%	1027	59	5.7%	0	0	0.0%	0	0	0.0%	1027	59	5.7%
2006	0	0	0.0%	0	0	0.0%	1029	49	4.8%	0	0	0.0%	0	0	0.0%	1029	49	4.8%
2007	0	0	0.0%	0	0	0.0%	693	40	5.8%	0	0	0.0%	0	0	0.0%	693	40	5.8%
2008	0	0	0.0%	0	0	0.0%	490	28	5.7%	0	0	0.0%	0	0	0.0%	490	28	5.7%
2009	0	0	0.0%	0	0	0.0%	286	12	4.2%	0	0	0.0%	0	0	0.0%	286	12	4.2%
2010	0	0	0.0%	0	0	0.0%	207	15	7.2%	0	0	0.0%	0	0	0.0%	207	15	7.2%
2011	0	0	0.0%	0	0	0.0%	173	10	5.8%	0	0	0.0%	0	0	0.0%	173	10	5.8%
2012	0	0	0.0%	0	0	0.0%	217	10	4.6%	0	0	0.0%	0	0	0.0%	217	10	4.6%
2013	0	0	0.0%	0	0	0.0%	68	4	5.9%	0	0	0.0%	0	0	0.0%	68	4	5.9%
2014	0	0	0.0%	0	0	0.0%	7	0	0.0%	0	0	0.0%	0	0	0.0%	7	0	0.0%
2015	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
Totals:	2263	733	32.4%	149	49	32.9%	13716	834	6.1%	335	98	29.3%	35	6	17.1%	16498	1720	10.4%
(a)(2iii) First Retest Pass																		
Totals:	2263	1023	45.2%	149	62	41.6%	13716	10556	77.0%	335	160	47.8%	35	21	60.0%	16498	11822	71.7%
Percent of First retest																		
FRFail	1756	41.7%		111	44.1%		11390	7.3%		258	38.0%		27	22.2%		13542	12.7%	



(a)(2ii) First Retest Fail

From 1/1/2014 to 12/31/2014

LD Truck Model Year	A			T			O			B			C			Total		
	ASM			TSI			OBD			OBD+ ASM			OBD+ TSI					
	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail
1968	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1969	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1970	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1971	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1972	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1973	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1974	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1975	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1976	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1977	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1978	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1979	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1980	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1981	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1982	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1983	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1984	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1985	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1986	2	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	2	0	0.0%
1987	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	1	0	0.0%
1988	13	1	7.7%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	13	1	7.7%
1989	17	4	23.5%	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	18	4	22.2%
1990	86	27	31.4%	2	1	50.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	88	28	31.8%
1991	166	50	30.1%	6	3	50.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	172	53	30.8%
1992	127	48	37.8%	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	128	48	37.5%
1993	241	82	34.0%	10	6	60.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	251	88	35.1%
1994	354	118	33.3%	6	1	16.7%	0	0	0.0%	0	0	0.0%	0	0	0.0%	360	119	33.1%
1995	350	134	38.3%	15	2	13.3%	0	0	0.0%	0	0	0.0%	0	0	0.0%	365	136	37.3%
1996	0	0	0.0%	0	0	0.0%	245	12	4.9%	56	22	39.3%	0	0	0.0%	301	34	11.3%
1997	0	0	0.0%	0	0	0.0%	358	29	8.1%	35	13	37.1%	0	0	0.0%	393	42	10.7%
1998	0	0	0.0%	0	0	0.0%	384	33	8.6%	2	1	50.0%	0	0	0.0%	386	34	8.8%
1999	0	0	0.0%	0	0	0.0%	494	33	6.7%	0	0	0.0%	0	0	0.0%	494	33	6.7%
2000	0	0	0.0%	0	0	0.0%	732	54	7.4%	0	0	0.0%	0	0	0.0%	732	54	7.4%
2001	0	0	0.0%	0	0	0.0%	772	59	7.6%	0	0	0.0%	0	0	0.0%	772	59	7.6%
2002	0	0	0.0%	0	0	0.0%	869	53	6.1%	0	0	0.0%	0	0	0.0%	869	53	6.1%
2003	0	0	0.0%	0	0	0.0%	675	40	5.9%	0	0	0.0%	0	0	0.0%	675	40	5.9%
2004	0	0	0.0%	0	0	0.0%	814	43	5.3%	1	0	0.0%	0	0	0.0%	815	43	5.3%
2005	0	0	0.0%	0	0	0.0%	611	28	4.6%	1	1	100.0%	0	0	0.0%	612	29	4.7%
2006	0	0	0.0%	0	0	0.0%	524	28	5.3%	0	0	0.0%	0	0	0.0%	524	28	5.3%
2007	0	0	0.0%	0	0	0.0%	310	21	6.8%	1	0	0.0%	0	0	0.0%	311	21	6.8%
2008	0	0	0.0%	0	0	0.0%	185	9	4.9%	0	0	0.0%	0	0	0.0%	185	9	4.9%
2009	0	0	0.0%	0	0	0.0%	96	3	3.1%	0	0	0.0%	0	0	0.0%	96	3	3.1%
2010	0	0	0.0%	0	0	0.0%	104	6	5.8%	0	0	0.0%	0	0	0.0%	104	6	5.8%
2011	0	0	0.0%	0	0	0.0%	53	2	3.8%	0	0	0.0%	0	0	0.0%	53	2	3.8%
2012	0	0	0.0%	0	0	0.0%	81	1	1.2%	0	0	0.0%	0	0	0.0%	81	1	1.2%
2013	0	0	0.0%	0	0	0.0%	20	1	5.0%	0	0	0.0%	0	0	0.0%	20	1	5.0%
2014	0	0	0.0%	0	0	0.0%	3	0	0.0%	0	0	0.0%	0	0	0.0%	3	0	0.0%
2015	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
Totals:	1357	464	34.2%	41	13	31.7%	7330	455	6.2%	96	37	38.5%	0	0	0.0%	8824	969	11.0%
(a)(2iii) First Retest Pass																		
Totals:	1357	667	49.2%	41	23	56.1%	7330	5757	78.5%	96	44	45.8%	0	0	0.0%	8824	6491	73.6%
Percent of First retest																		
FRFail	1131	41.0%		36	36.1%		6212	7.3%		81	45.7%		0	#DIV/0!		7460	13.0%	



(a)(2ii) First Retest Fail

From 1/1/2014 to 12/31/2014

MD Truck Model Year	A			T			O			B			C			Total		
	ASM			TSI			OBD			OBD+ ASM			OBD+ TSI					
	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail
1968	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1969	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1970	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1971	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1972	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1973	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1974	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1975	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1976	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1977	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1978	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1979	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1980	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1981	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1982	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1983	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1984	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1985	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1986	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1987	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1988	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1989	6	2	33.3%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	6	2	33.3%
1990	26	7	26.9%	1	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	27	7	25.9%
1991	24	10	41.7%	4	3	75.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	28	13	46.4%
1992	30	12	40.0%	6	1	16.7%	0	0	0.0%	0	0	0.0%	0	0	0.0%	36	13	36.1%
1993	65	13	20.0%	4	2	50.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	69	15	21.7%
1994	98	38	38.8%	8	2	25.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	106	40	37.7%
1995	117	34	29.1%	6	4	66.7%	0	0	0.0%	0	0	0.0%	0	0	0.0%	123	38	30.9%
1996	0	0	0.0%	0	0	0.0%	84	7	8.3%	0	0	0.0%	0	0	0.0%	84	7	8.3%
1997	0	0	0.0%	0	0	0.0%	107	10	9.3%	0	0	0.0%	0	0	0.0%	107	10	9.3%
1998	0	0	0.0%	0	0	0.0%	147	14	9.5%	0	0	0.0%	0	0	0.0%	147	14	9.5%
1999	0	0	0.0%	0	0	0.0%	159	13	8.2%	0	0	0.0%	0	0	0.0%	159	13	8.2%
2000	0	0	0.0%	0	0	0.0%	199	16	8.0%	0	0	0.0%	0	0	0.0%	199	16	8.0%
2001	0	0	0.0%	0	0	0.0%	243	14	5.8%	0	0	0.0%	0	0	0.0%	243	14	5.8%
2002	0	0	0.0%	0	0	0.0%	297	22	7.4%	0	0	0.0%	0	0	0.0%	297	22	7.4%
2003	0	0	0.0%	0	0	0.0%	341	25	7.3%	0	0	0.0%	0	0	0.0%	341	25	7.3%
2004	0	0	0.0%	0	0	0.0%	384	15	3.9%	0	0	0.0%	0	0	0.0%	384	15	3.9%
2005	0	0	0.0%	0	0	0.0%	219	12	5.5%	0	0	0.0%	0	0	0.0%	219	12	5.5%
2006	0	0	0.0%	0	0	0.0%	272	17	6.3%	0	0	0.0%	0	0	0.0%	272	17	6.3%
2007	0	0	0.0%	0	0	0.0%	214	5	2.3%	0	0	0.0%	0	0	0.0%	214	5	2.3%
2008	0	0	0.0%	0	0	0.0%	202	8	4.0%	0	0	0.0%	0	0	0.0%	202	8	4.0%
2009	0	0	0.0%	0	0	0.0%	75	2	2.7%	0	0	0.0%	0	0	0.0%	75	2	2.7%
2010	0	0	0.0%	0	0	0.0%	66	5	7.6%	0	0	0.0%	0	0	0.0%	66	5	7.6%
2011	0	0	0.0%	0	0	0.0%	38	3	7.9%	0	0	0.0%	0	0	0.0%	38	3	7.9%
2012	0	0	0.0%	0	0	0.0%	41	0	0.0%	0	0	0.0%	0	0	0.0%	41	0	0.0%
2013	0	0	0.0%	0	0	0.0%	10	1	10.0%	0	0	0.0%	0	0	0.0%	10	1	10.0%
2014	0	0	0.0%	0	0	0.0%	8	1	12.5%	0	0	0.0%	0	0	0.0%	8	1	12.5%
2015	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
Totals:	366	116	31.7%	29	12	41.4%	3106	190	6.1%	0	0	0.0%	0	0	0.0%	3501	318	9.1%
(a)(2iii) First Retest Pass																		
Totals:	366	163	44.5%	29	15	51.7%	3106	2488	80.1%	0	0	0.0%	0	0	0.0%	3501	2666	76.1%
Percent of First retest																		
FRFail	279	41.6%		27	44.4%		2678	7.1%		0	#DIV/0!		0	#DIV/0!		2984	10.7%	



(a)(2ii) First Retest Fail

From 1/1/2014 to 12/31/2014

HD Truck Model Year	A			T			O			B			C			Total		
	ASM			TSI			OBD			OBD+ ASM			OBD+ TSI					
	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail	Test Count	Fail Count	% Fail
1968	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1969	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1970	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1971	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1972	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1973	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1974	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1975	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1976	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1977	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1978	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1979	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1980	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1981	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1982	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1983	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1984	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1985	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1986	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1987	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1988	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
1989	0	0	0.0%	3	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	3	0	0.0%
1990	0	0	0.0%	11	3	27.3%	0	0	0.0%	0	0	0.0%	0	0	0.0%	11	3	27.3%
1991	0	0	0.0%	7	1	14.3%	0	0	0.0%	0	0	0.0%	0	0	0.0%	7	1	14.3%
1992	0	0	0.0%	14	7	50.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	14	7	50.0%
1993	0	0	0.0%	15	5	33.3%	0	0	0.0%	0	0	0.0%	0	0	0.0%	15	5	33.3%
1994	0	0	0.0%	17	8	47.1%	0	0	0.0%	0	0	0.0%	0	0	0.0%	17	8	47.1%
1995	0	0	0.0%	38	13	34.2%	0	0	0.0%	0	0	0.0%	0	0	0.0%	38	13	34.2%
1996	0	0	0.0%	21	7	33.3%	6	0	0.0%	0	0	0.0%	0	0	0.0%	27	7	25.9%
1997	0	0	0.0%	34	11	32.4%	12	1	8.3%	0	0	0.0%	0	0	0.0%	46	12	26.1%
1998	0	0	0.0%	38	17	44.7%	10	2	20.0%	0	0	0.0%	0	0	0.0%	48	19	39.6%
1999	0	0	0.0%	44	12	27.3%	8	1	12.5%	0	0	0.0%	0	0	0.0%	52	13	25.0%
2000	0	0	0.0%	62	27	43.5%	26	4	15.4%	0	0	0.0%	0	0	0.0%	88	31	35.2%
2001	0	0	0.0%	34	12	35.3%	31	5	16.1%	0	0	0.0%	0	0	0.0%	65	17	26.2%
2002	0	0	0.0%	46	9	19.6%	28	3	10.7%	0	0	0.0%	0	0	0.0%	74	12	16.2%
2003	0	0	0.0%	43	14	32.6%	38	4	10.5%	0	0	0.0%	0	0	0.0%	81	18	22.2%
2004	0	0	0.0%	39	13	33.3%	43	2	4.7%	0	0	0.0%	0	0	0.0%	82	15	18.3%
2005	0	0	0.0%	4	1	25.0%	38	3	7.9%	0	0	0.0%	0	0	0.0%	42	4	9.5%
2006	0	0	0.0%	3	0	0.0%	68	5	7.4%	0	0	0.0%	0	0	0.0%	71	5	7.0%
2007	0	0	0.0%	0	0	0.0%	46	4	8.7%	0	0	0.0%	0	0	0.0%	46	4	8.7%
2008	0	0	0.0%	0	0	0.0%	33	1	3.0%	0	0	0.0%	0	0	0.0%	33	1	3.0%
2009	0	0	0.0%	0	0	0.0%	8	0	0.0%	0	0	0.0%	0	0	0.0%	8	0	0.0%
2010	0	0	0.0%	0	0	0.0%	16	0	0.0%	0	0	0.0%	0	0	0.0%	16	0	0.0%
2011	0	0	0.0%	0	0	0.0%	15	1	6.7%	0	0	0.0%	0	0	0.0%	15	1	6.7%
2012	0	0	0.0%	0	0	0.0%	11	0	0.0%	0	0	0.0%	0	0	0.0%	11	0	0.0%
2013	0	0	0.0%	0	0	0.0%	3	1	33.3%	0	0	0.0%	0	0	0.0%	3	1	33.3%
2014	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
2015	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%	0	0	0.0%
Totals:	0	0	0.0%	473	160	33.8%	440	37	8.4%	0	0	0.0%	0	0	0.0%	913	197	21.6%
(a)(2iii) First Retest Pass																		
Totals:	0	0	0.0%	473	221	46.7%	440	345	78.4%	0	0	0.0%	0	0	0.0%	913	566	62.0%
Percent of First retest																		
FRFail				0	#DIV/0!		381	42.0%		382	9.7%		0	#DIV/0!		763	25.8%	